

## ABSTRACT

### Background and objectives:

Mechanical closure of dead space by flap fixation is a simple surgical procedure that eliminates dead space after mastectomy, by decreasing the movement of flap over chest wall and thereby reducing the exudate.

The objective of this study is to evaluate the effect of mechanical closure of dead space after mastectomy in prevention of seroma formation.

### Method:

A total of 80 patients of Carcinoma Breast who underwent Modified Radical Mastectomy in Department of general surgery, Government Rajaji Hospital, Madurai during the period from may 2018 to october2018, were included in this prospective study, and

randomized into two groups based on in-patient number. 42 patients with odd IP no in conventional simple wound closure (Group A) and 38 patients with even IP no in Flap fixation (Group B). Patients were evaluated for day 1 drain volume, total drain volume, drain removal day, seroma, and wound complications.

### Result:

There was no statistically significant difference in the drain volume in first post-operative day ( $p>0.05$ ).

The average total drain volume in the post-operative period in group A was 1426ml and 932ml in group B. p value was found to be significant ( $<0.001$ ).

The average day of drain removal in group A was 13 days and 8 days in group B. p value was found to be significant ( $<0.001$ ).

8 patients developed seroma in group A vs none in group B. p value was found to be significant ( $>0.05$ ).

## Conclusion:

The present prospective study demonstrated that the mechanical obliteration of dead space by flap fixation significantly decreases the incidence of seroma formation reduces complications related to seroma formation

Keywords: Carcinoma breast;Modified radicalmastectomy;Seroma;Flapfixation;